

IMPROVING THE WASTE MANAGEMENT SYSTEM IN SURKHANDARYA

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Abstract

This article delves into the pressing issue of waste management in Surkhandarya, a region in southern Uzbekistan. It examines the existing waste management challenges, analyzes potential solutions, and outlines a comprehensive strategy to enhance the waste management system. The study draws upon literature analysis, expert opinions, and case studies to provide valuable insights for sustainable development in Surkhandarya.

Keywords: Waste management, Surkhandarya, sustainability, waste disposal, recycling, infrastructure, public health, environmental impact.

Аннотация

В данной статье рассматривается актуальная проблема управления отходами в Сурхандарьинской области на юге Узбекистана. В нем рассматриваются существующие проблемы управления отходами, анализируются потенциальные решения и обрисовывается комплексная стратегия по совершенствованию системы управления отходами. Исследование основано на анализе литературы, мнениях экспертов и тематических исследованиях, чтобы предоставить ценную информацию для устойчивого развития в Сурхандарьинской области.

Ключевые слова: Управление отходами, Сурхандарьинская область, устойчивое развитие, утилизация отходов, переработка, инфраструктура, здравоохранение, воздействие на окружающую среду.

INTRODUCTION

Surkhandarya, a region renowned for its cultural heritage and natural beauty, faces significant challenges in managing its waste effectively. The region's growing population and urbanization have led to increased waste generation, posing threats to the environment, public health, and the overall quality of life. This article aims to assess the current state of waste management in Surkhandarya, propose potential solutions, and outline a comprehensive strategy for sustainable development.



LITERATURE ANALYSIS AND METHODOLOGY

The literature on waste management in Surkhandarya reveals several critical aspects:

1. **Rapid Urbanization:** Surkhandarya has witnessed a rapid increase in population and urban development, resulting in a corresponding rise in waste generation.
2. **Inadequate Infrastructure:** The existing waste management infrastructure is insufficient to handle the increasing volume of waste, leading to inefficient collection and disposal practices.
3. **Environmental Impact:** Improper waste disposal practices, such as open dumping and burning, have adverse effects on air and soil quality, as well as local ecosystems.
4. **Public Health Concerns:** Inadequate waste management poses health risks to the population, including the spread of diseases and exposure to hazardous materials.
5. **Recycling and Circular Economy:** The literature highlights the potential for implementing recycling programs and adopting a circular economy approach to reduce waste generation and promote sustainability.

To address the waste management challenges in Surkhandarya, a comprehensive methodology was employed:

1. **Data Collection:** Primary and secondary data sources were used to gather information on waste generation rates, disposal practices, and existing infrastructure.
2. **Expert Interviews:** Interviews with local waste management experts, officials, and community representatives were conducted to gain insights into the challenges and opportunities in the region.
3. **Environmental Impact Assessment:** An assessment of the environmental impact of current waste management practices was conducted, including air and soil quality analysis.
4. **Stakeholder Engagement:** Engaging with stakeholders, including the local community, was crucial to understanding their concerns and garnering support for potential solutions.

RESULTS

The analysis revealed several key findings:

1. High Waste Generation: Surkhandarya is experiencing a significant increase in waste generation, driven by population growth and urbanization.
2. Inefficient Disposal: Open dumping and unregulated waste disposal practices are common, contributing to environmental pollution and health risks.
3. Environmental Degradation: Improper waste disposal has led to soil and air pollution, negatively impacting local ecosystems and public health.
4. Potential for Improvement: The study identified opportunities for sustainable waste management, including the implementation of recycling initiatives, enhanced infrastructure, and community education.

CONCLUSION

Improving the waste management system in Surkhandarya is paramount for the region's sustainable development. The challenges stemming from rapid urbanization and inefficient waste management practices can be addressed through a comprehensive strategy that includes waste reduction, recycling programs, upgraded infrastructure, and community engagement. By adopting these measures, Surkhandarya can transition towards a more environmentally responsible and economically sustainable waste management system, contributing to the region's overall well-being and development.

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